

Application No.: 10/705,225
Attorney Docket: 071469-0305807
Client Reference: PC0269A

REMARKS

Claims 1, 7, 8, 9, 12, and 20 are amended hereby. No claims are canceled or added. Claims 21-23 are withdrawn from further consideration. Accordingly, while claims 1-23 are currently pending, only claims 1-20 are currently being considered.

In the Office Action dated December 6, 2005, the Examiner acknowledged the Applicant's election of Group I, encompassing claims 1-20, with traverse. The Examiner found the traversal unpersuasive and, therefore, made the requirement final. While the Applicant respectfully disagrees with the Examiner's determination, the Applicant acknowledges same.

Before addressing the rejections expressed by the Examiner, the Applicant respectfully notes that claims 7-9 have been amended voluntarily to remove the trademark "Teflon" therefrom and replace the term with the generic term "polytetrafluoroethylene." To the extent that this substitution broadens the scope of these claims, this result is intended. Moreover, the Applicant respectfully submits that the claims are now in a better condition for allowance since the usage of a trademark has been removed therefrom. In addition, the Applicant respectfully notes that claim 12 has been amended to correct a typographical error. Since this change is purely typographical in nature, the Applicant respectfully submits that this amendment does not preclude the application of the doctrine of equivalents to claim 12, should the claim be asserted after issuance.

In the Office Action, the Examiner rejected claims 1-3, 7-9, 11-13, and 20 under 35 U.S.C. § 103(a) as being unpatentable over Ookawa et al. (U.S. Patent No. 6,758,941) in view of Takeuchi et al. (U.S. Patent No. 5,935,337). Claims 4-6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ookawa et al. in view of Takeuchi et al. and further in view of Nguyen (U.S. Patent No. 6,565,661). Next, the Examiner rejected claim 10 under 35 U.S.C. § 103(a) as being unpatentable over Ookawa et al. in view of Takeuchi et al. and further in view of Legler et al. (U.S. Patent No. 6,155,524). Finally, claims 14-19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Ookawa et al. in view of Takeuchi et al. and further in view of Otsuki (U.S. Patent Application Publication No. 2001/0003271). The

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Applicant respectfully disagrees with each of these rejections and, therefore, respectfully traverses the same.

Claims 1-20 recite an electrode plate assembly (claim 1) and a disposable electrode plate (claim 20) that combine a number of features including, among them, a plurality of removable gas injection devices coupled to the plurality of gas injection holes. None of the references upon which the Examiner relies discuss or suggest at least this feature. Accordingly, the Applicant respectfully submits that the references cited by the Examiner do not make out a *prima facie* case of unpatentability under 35 U.S.C. § 103(a). As a result, the Applicant respectfully requests that the Examiner withdraw the rejections and pass this application quickly to issue.

Ookawa et al. describes a plasma processing unit and an electrode plate for a plasma processing unit. The upper electrode 2 has an electrode body 2A and an electrode plate 2B removably attached to the under surface of the electrode body 2A by means of fastening members 9, such as screws. (Ookawa et al. at col. 4, lines 39-45.) The electrode body 2A may be made from alumite-treated aluminum. (Ookawa et al. at col. 4, lines 45-48.) The electrode plate 2B may be made from alumite-treated aluminum, silicon, silicon carbide or carbon. (Ookawa et al. at col. 4, lines 50-53.) Gas is jetted through gas-dispersion holes 2D in the electrode plate 2B. (Ookawa et al. at col. 4, lines 56-60.) There is no discussion of a plurality of removable gas injection devices coupled to the gas injection holes.

Takeuchi et al. does not cure the deficiency noted with respect to Ookawa et al. In fact, Takeuchi et al. actually teaches away from the invention as recited by claims 1-20. Takeuchi et al. describes a thin-film vapor deposition apparatus that includes a shower head 16 with cylindrical nozzle pipes 18A, each with a nozzle 18 positioned centrally in a lower end thereof. (Takeuchi et al. at col. 14, lines 33-39.) The circumferential outer walls of each of the cylindrical nozzle pipes 18A are welded in their entirety to the respective first and second members 25, 26. (Takeuchi et al. at col. 14, lines 45-48; see also Fig. 10. Emphasis added.) Similarly, the upper and lower ends of the circumferential outer walls of the nozzle pipe 18B are welded in their entirety to the respective first and second members 25, 26. (Takeuchi et al. at col. 14, lines 64-67; see also Fig. 11. Emphasis added.) In addition, like the previous embodiments, the cylindrical nozzle pipe 18C has a lower

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end that is integrally joined to the first member 25 and an upper end fitted in a nozzle hole defined in the second member 26 and welded thereto. (Takeuchi et al. at col. 15, lines 10-13; see also Fig. 12. Emphasis added.) Since the embodiments of the nozzle pipes 18A, 18B, 18C are each welded to one or both of the first and second member 25, 26, the nozzle pipes 18A, 18B, 18C are not removable. Moreover, there is no indication that the nozzle pipes 18A, 18B, 18C should be or could be removable. Accordingly, the Applicant respectfully submits that the combination of Ookawa et al. and Takeuchi et al. fail to render obvious any of claims 1-20.

Nguyen does not cure the deficiencies noted above with respect to Ookawa et al. or with Takeuchi et al. Accordingly, the Applicant respectfully submits that Nguyen cannot be combined properly with Ookawa et al. or Takeuchi et al. to render obvious any of claims 1-20. Nguyen describes a high flow conductance and high thermal conductance shower head. The showerhead plate is composed of a plate 14 with a thickness T having various delivery holes 18. (Nguyen at col. 6, lines 24-26.) The delivery holes have different sizes, a larger size 19 and a smaller size 18. (Nguyen at col. 6, lines 26-27.) Fig. 5 illustrates various embodiments of showerhead plates 14, 34, 44, 54, 64, 74, and 84. (Nguyen at col. 6, lines 63-65.) At no place does Nguyen describe a plurality of removable gas injection devices coupled to the delivery holes 18, 19. Accordingly, the Applicant respectfully submits that Nguyen cannot be combined with Ookawa et al. or Takeuchi et al. to render obvious any of claims 1-20.

Legler et al. is singularly deficient in addressing the deficiencies noted above with respect to Ookawa et al., Takeuchi et al., or Nguyen and, as a result, cannot be combined with the references to render obvious claims 1-20. Legler et al. describes a quick release locking system including a slotted bracket 80 and with T-shaped slots 84 for engaging pin heads 75 on a locking pin bracket 70. (Legler et al. at col. 3, lines 59-65.) There is no discussion of a plasma processing chamber, a showerhead, or any other structure that would suggest that Legler et al. could or should be combined with Ookawa et al., Takeuchi et al., or Nguyen to render obvious any of claims 1-20.

Otsuki also fails to cure the deficiencies noted with respect to the remaining references. Otsuki describes a processing apparatus with a chamber having a high-corrosion-resistant sprayed film. There is no discussion of a plurality of gas injection

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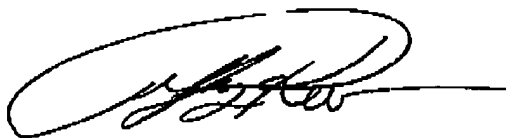
devices coupled to a plurality of gas injection holes, among others of the features recited by the claims. Accordingly, the Applicant respectfully submits that Otsuki does not assist the Examiner with a rejection of any of claims 1-20.

In view of the foregoing, the Applicant respectfully requests that the Examiner withdraw the rejections of claims 1-20 under 35 U.S.C. § 103(a) so that this application may be passed quickly to issue.

Please charge any fees associated with the submission of this paper to Deposit Account Number 033975. The Commissioner for Patents is also authorized to credit any over payments to the above-referenced Deposit Account.

Respectfully submitted,

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